

In the Claims:

Please cancel claims 1-8.

Please add the following new claims:

9. (new) A analysis device comprising:

a housing;

at least one glass slide member positioned in the housing;

an elastomer member positioned in said housing and said housing urging said elastomer member into sealing arrangement with said at least one glass slide member, said elastomer member having at least one channel thereon, at least one inlet port and at least one outlet port;

wherein materials entering said housing through said at least one inlet port are transported through said at least one channel and out through said at least one outlet port.

10. (new) The analysis device as claimed in claim 9 wherein a plurality of inlet ports and a plurality of outlet ports are provided in said elastomer member.

11. (new) The analysis device as claimed in claim 9 wherein two glass slide members are provided, one positioned on each side of said elastomer member, and wherein said elastomer member has at least one channel on each side.

12. (new) The analysis device as claimed in claim 9 wherein said elastomer member provides a liquid tight seal on said glass slide member without the need for adhesives, gaskets or other sealing members between the glass slide member and the elastomer member.

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13. (new) The analysis device as claimed in claim 12 wherein said elastomer member is made from a material selected from the group comprising polydimethylsiloxane (PDMS), liquid silicone rubber (LSR) or other elastomeric material having an inherent sealing affinity.

14. (new) A system for analyzing materials comprising:  
at least one analysis device and a support base,

(a) said analysis device comprising:

- (i) a housing;
- (ii) at least one glass slide member positioned in the housing;
- (iii) an elastomer member within said housing, said housing urging said elastomer member into a sealing arrangement with said at least one glass slide member, said elastomer member having at least one channel thereon, at least one inlet port and at least one outlet port;
- (iv) wherein materials entering through said at least one inlet port are transported through said at least one channel and out through said at least one outlet port, and

(b) said support base comprising a housing having a control portion and a receptacle portion, said receptacle portion having space for a plurality of analysis devices, and said control portion having a mechanism for eliminating waste materials ejected from said analysis devices.

15. (new) The system as claimed in claim 14 further comprising evaluation means for inspecting said at least one slide member.

16. (new) A method for evaluating materials comprising:  
applying materials onto a glass slide member;  
installing said glass slide member into an analysis device having a housing and an elastomer layer member;  
urging the glass slide into a sealing arrangement with the elastomer layer within the housing;

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passing samples and reagents through an inlet of said analysis device and into a material area and contacting material in said material area with said samples and reagents;

disassembling said analyzer; and

analyzing said material on said glass slide member.

17. (new) A device comprising:

a housing having a first portion and a second portion, said first portion engaging said second portion;

at least one glass slide member positioned between the first housing portion and the second housing portion;

an elastomer member positioned between said first housing portion and said second housing portion so that when assembled said first housing portion and said second housing portion urge said elastomer member into a sealing arrangement with said at least glass slide member, said elastomer member having at least one channel, at least one inlet port and at least one outlet port and a material area;

wherein materials entering said housing through said at least one inlet port are transported through said at least one channel and out through said at least one outlet port.

18. (new) The synthesis device as recited in claim 17 further comprising a material site affixed on said slide within said assay area.

19. (new) The device as recited in claim 18 further comprising a window through said first housing portion adjacent to said material sight so that analysis of the material site may be performed therethrough.

20. (new) The device as claimed in claim 17 wherein a plurality of inlet ports and a plurality of outlet ports are provided in said elastomer member.